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“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

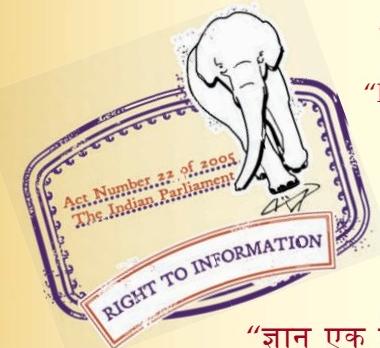
“Step Out From the Old to the New”

IS 7726 (1975): Limits of sizes for ISO metric trapezoidal nut threads (diameter range 105 to 300 mm) [PGD 20: Engineering Standards]

“ज्ञान से एक नये भारत का निर्माण”

Satyanareshwar Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartṛhari—Nītiśākām

“Knowledge is such a treasure which cannot be stolen”



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Indian Standard

LIMITS OF SIZES FOR ISO METRIC
TRAPEZOIDAL NUT THREADS
(DIAMETER RANGE 105 TO 300 mm)

REAFFIRMED 1990

1. Scope — Specifies the limits of sizes for ISO metric trapezoidal nut threads in the diameter range 105 to 300 mm.

2. Dimensions — As given in Table 1, read with Fig. 1.

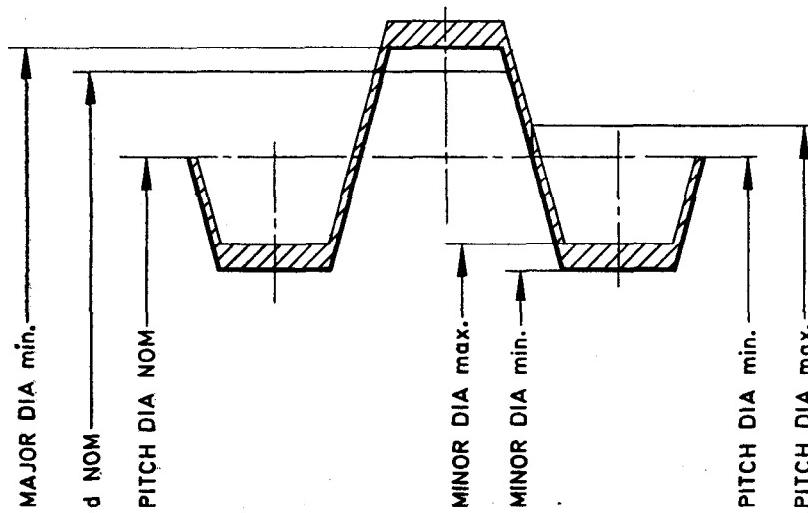


FIG. 1 INTERNAL THREADS WITH TOLERANCE POSITION H

**TABLE 1 LIMITS OF SIZES FOR ISO METRIC TRAPEZOIDAL NUT THREADS
(DIAMETER RANGE 105 TO 300 mm)**
(Clause 2)

All dimensions in millimetres.

Nominal Diameter <i>d</i>	Pitch <i>P</i>	Major Diameter <i>Min</i>	Pitch Diameter			Minor Diameter		
			Tolerance Class	Min	Max	Tolerance Class	Min	Max
105	4	105.500	7H		103.425	4H		
			8H		103.530		101.000	101.375
			9H		103.670			
	12	106.000	7H		99.670	4H		
			8H		99.850		93.000	93.800
			9H		100.060			
	20	107.000	7H		95.800	4H		
			8H		96.000		85.000	86.180
			9H		96.250			
110	4	110.500	7H		108.425	4H		
			8H		108.530		106.000	106.375
			9H		108.670			
	12	111.000	7H		104.670	4H		
			8H		104.850		98.000	98.800
			9H		105.060			
	20	112.000	7H		100.800	4H		
			8H		101.000		90.000	91.180
			9H		101.250			
115	6	116.000	7H		112.500	4H		
			8H		112.630		109.000	109.500
			9H		112.800			
	14	117.000	7H		108.710	4H		
			8H		108.900		101.000	101.900
			9H		109.120			
	22	117.000	7H		104.850	4H		
			8H		105.060		93.000	94.250
			9H		105.320			
120	6	121.000	7H		117.500	4H		
			8H		117.630		114.000	114.500
			9H		117.800			
	14	122.000	7H		113.710	4H		
			8H		113.900		106.000	106.900
			9H		114.120			
	22	122.000	7H		109.850	4H		
			8H		110.060		98.000	99.250
			9H		110.320			
125	6	126.000	7H		122.500	4H		
			8H		122.630		119.000	119.500
			9H		122.800			
	14	127.000	7H		118.710	4H		
			8H		118.900		111.000	111.900
			9H		119.120			
	22	127.000	7H		114.850	4H		
			8H		115.060		103.000	104.250
			9H		115.320			
130	6	131.000	7H		127.500	4H		
			8H		127.630		124.000	124.500
			9H		127.800			
	14	132.000	7H		123.710	4H		
			8H		123.900		116.000	116.900
	22	132.000	7H		124.120			
			8H		119.850			
			9H		120.060			
					120.320			

(Continued)

TABLE 1 LIMITS OF SIZES FOR ISO METRIC TRAPEZOIDAL NUT THREADS
(DIAMETER RANGE 105 TO 300 mm) — *Contd*

All dimensions in millimetres.

Nominal Diameter <i>d</i>	Pitch <i>P</i>	Major Diameter <i>Min</i>	Pitch Diameter			Minor Diameter		
			Tolerance Class	Min	Max	Tolerance Class	Min	Max
135	6	136·000	7H	132·000	132·500	4H	129·000	129·500
			8H	132·630				
			9H	132·800				
	14	137·000	7H	128·000	128·710	4H	121·000	121·900
			8H	128·900				
			9H	129·120				
	24	137·000	7H	123·000	123·900	4H	111·000	112·320
			8H	124·120				
			9H	124·400				
140	6	141·000	7H	137·000	137·500	4H	134·000	134·500
			8H	137·630				
			9H	137·800				
	14	142·000	7H	133·000	133·710	4H	126·000	126·900
			8H	133·900				
			9H	134·120				
	24	142·000	7H	128·000	128·900	4H	116·000	117·320
			8H	129·120				
			9H	129·400				
145	6	146·000	7H	142·000	142·500	4H	139·000	139·500
			8H	142·630				
			9H	142·800				
	14	147·000	7H	138·000	138·710	4H	131·000	131·900
			8H	138·900				
			9H	139·120				
	24	147·000	7H	133·000	133·900	4H	121·000	122·320
			8H	134·120				
			9H	134·400				
150	6	151·000	7H	147·000	147·500	4H	144·000	144·500
			8H	147·630				
			9H	147·800				
	16	152·000	7H	142·500	142·730	4H	134·000	135·000
			8H	142·930				
			9H	143·180				
	24	152·000	7H	138·000	138·900	4H	126·000	127·320
			8H	139·120				
			9H	139·400				
155	6	156·000	7H	152·000	152·500	4H	149·000	149·500
			8H	152·630				
			9H	152·800				
	16	157·000	7H	147·000	147·750	4H	139·000	140·000
			8H	147·950				
			9H	148·180				
	24	157·000	7H	143·000	143·900	4H	131·000	132·320
			8H	144·120				
			9H	144·400				
160	6	161·000	7H	157·000	157·500	4H	154·000	154·500
			8H	157·630				
			9H	157·800				
	16	162·000	7H	152·000	152·750	4H	144·000	145·000
			8H	152·950				
	28	162·000	7H	146·000	146·950	4H	132·000	133·500
	8H	147·180						
	9H	147·500						

(Continued)

**TABLE 1 LIMITS OF SIZES FOR ISO METRIC TRAPEZOIDAL NUT THREADS
(DIAMETER RANGE 105 TO 300 mm) — Contd**

All dimensions in millimetres.

Nominal Diameter <i>d</i>	Pitch <i>P</i>	Major Diameter <i>Min</i>	Pitch Diameter			Minor Diameter		
			Tolerance Class	Min	Max	Tolerance Class	Min	Max
165	6	166·000	7H		162·500	4H		
			8H		162·630		159·000	159·500
			9H	162·000	162·800			
	16	167·000	7H		157·750	4H		
			8H		157·950		149·000	150·000
			9H	157·000	158·180			
	28	167·000	7H		151·950	4H		
			8H		152·180		137·000	138·500
			9H	151·000	152·500			
170	6	171·000	7H		167·500	4H		
			8H		167·630		164·000	164·500
			9H	167·000	167·800			
	16	172·000	7H		162·740	4H		
			8H		162·950		154·000	155·000
			9H	162·000	163·180			
	28	172·000	7H		156·950	4H		
			8H		157·180		142·000	143·500
			9H	156·000	157·500			
175	8	176·000	7H		171·560	4H		
			8H		171·710		167·000	167·630
			9H	171·000	171·900			
	16	177·000	7H		167·750	4H		
			8H		167·950		159·000	160·000
			9H	167·000	168·180			
	28	177·000	7H		161·950	4H		
			8H		162·180		147·000	148·500
			9H	161·000	162·500			
180	8	181·000	7H		176·560	4H		
			8H		176·710		172·000	172·630
			9H	176·000	176·900			
	18	182·000	7H		171·800	4H		
			8H		172·000		162·000	163·120
			9H	171·000	172·250			
	28	182·000	7H		166·950	4H		
			8H		167·180		152·000	153·500
			9H	166·000	167·500			
185	8	186·000	7H		181·600	4H		
			8H		181·750		177·000	177·630
			9H	181·000	181·950			
	18	187·000	7H		176·850	4H		
			8H		177·060		167·000	168·120
			9H	176·000	177·320			
	32	187·000	7H		170·060	4H		
			8H		170·320		153·000	154·600
			9H	169·000	170·700			
190	8	191·000	7H		186·600	4H		
			8H		186·750		182·000	182·630
			9H	186·000	186·950			
	18	192·000	7H		181·850	4H		
			8H		182·060		172·000	173·120
			9H	181·000	182·320			
	32	192·000	7H		175·060	4H		
			8H		175·320		158·000	159·600
			9H	174·000	175·700			

(Continued)

**TABLE 1 LIMITS OF SIZES FOR ISO METRIC TRAPEZOIDAL NUT THREADS
(DIAMETER RANGE 105 TO 300 mm) — Contd**

All dimensions in millimetres.

Nominal Diameter <i>d</i>	Pitch <i>P</i>	Major Diameter <i>Min</i>	Pitch Diameter			Minor Diameter		
			Tolerance Class	<i>Min</i>	<i>Max</i>	Tolerance Class	<i>Min</i>	<i>Max</i>
195	8	196.000	7H 8H 9H	191.000	191.600 191.750 191.950	4H	187.000	187.630
	18	197.000	7H 8H 9H	186.000	186.850 187.060 187.320	4H	177.000	178.120
	32	197.000	7H 8H 9H	179.000	180.060 180.320 180.700	4H	163.000	164.600
	8	201.000	7H 8H 9H	196.000	196.600 196.750 196.950	4H	192.000	192.630
	18	202.000	7H 8H 9H	191.000	191.850 192.060 192.320	4H	182.000	183.120
	32	202.000	7H 8H 9H	184.000	185.060 185.320 185.700	4H	168.000	169.600
	8	211.000	7H 8H 9H	206.000	206.600 206.750 206.950	4H	202.000	202.630
	20	212.000	7H 8H 9H	200.000	200.900 201.120 201.400	4H	190.000	191.180
	36	212.000	7H 8H 9H	192.000	193.120 193.400 193.800	4H	174.000	175.600
210	8	221.000	7H 8H 9H	216.000	216.600 216.750 216.950	4H	212.000	212.630
	20	222.000	7H 8H 9H	210.000	210.900 211.120 211.400	4H	200.000	201.180
	36	222.000	7H 8H 9H	202.000	203.120 203.400 203.800	4H	184.000	185.800
	8	231.000	7H 8H 9H	226.000	226.600 226.750 226.950	4H	222.000	222.630
	20	232.000	7H 8H 9H	220.000	220.900 221.120 221.400	4H	210.000	211.180
	36	232.000	7H 8H 9H	212.000	213.120 213.400 213.800	4H	194.000	195.800
230	8	241.000	7H 8H 9H	236.000	236.600 236.750 236.950	4H	232.000	232.630
	20	242.000	7H 8H 9H	229.000	229.900 230.120 230.400	4H	218.000	219.250
	36	242.000	7H 8H 9H	222.000	223.120 223.400 223.800	4H	204.000	205.800

(Continued)

**TABLE 1 LIMITS OF SIZES FOR ISO METRIC TRAPEZOIDAL NUT THREADS
(DIAMETER RANGE 105 TO 300 mm) — *Contd***

All dimensions in millimetres.

Nominal Diameter <i>d</i>	Pitch <i>P</i>	Major Diameter <i>Min</i>	Pitch Diameter			Minor Diameter		
			Tolerance Class	Min	Max	Tolerance Class	Min	Max
250	12	251·000	7H 8H 9H	244·000	244·710 244·900 245·120	4H	238·000	238·800
	22	252·000	7H 8H 9H	239·000	239·900 240·120 240·400	4H	228·000	229·250
	40	252·000	7H 8H 9H	230·000	231·120 231·400 231·800	4H	210·000	211·900
260	12	261·000	7H 8H 9H	254·000	254·710 254·900 255·120	4H	248·000	248·800
	22	262·000	7H 8H 9H	249·000	249·900 250·120 250·400	4H	238·000	239·250
	40	262·000	7H 8H 9H	240·000	241·120 241·400 241·800	4H	220·000	221·900
270	12	271·000	7H 8H 9H	264·000	264·710 264·900 267·120	4H	258·000	258·800
	24	272·000	7H 8H 9H	258·000	258·950 259·180 259·500	4H	246·000	247·320
	40	272·000	7H 8H 9H	250·000	251·120 251·400 251·800	4H	230·000	231·900
280	12	281·000	7H 8H 9H	274·000	274·710 274·900 275·120	4H	268·000	268·800
	24	282·000	7H 8H 9H	268·000	268·950 269·180 269·500	4H	256·000	257·320
	40	282·000	7H 8H 9H	260·000	261·120 261·400 261·800	4H	240·000	241·900
290	12	291·000	7H 8H 9H	284·000	284·710 284·900 285·120	4H	278·000	278·800
	24	292·000	7H 8H 9H	278·000	278·950 279·180 279·500	4H	266·000	267·320
	44	292·000	7H 8H 9H	268·000	269·250 269·500 269·900	4H	246·000	248·000
300	12	301·000	7H 8H 9H	294·000	294·710 294·900 295·120	4H	288·000	288·800
	24	302·000	7H 8H 9H	288·000	288·950 289·180 289·500	4H	276·000	277·320
	44	302·000	7H 8H 9H	278·000	279·250 279·500 279·900	4H	256·000	258·000

EXPLANATORY NOTE

This standard is based on DIN 103 Blatt 6 (October 1972) Metrisches ISO-Trapezgewinde Grenzmasse fur Muttergewinde Von 105 bis 300 mm Nenndurchmesser (ISO metric trapezoidal internal screw threads from 105 to 300 mm diameter; Limits of sizes), issued by Deutscher Normenausschuss. This standard is one of a series of Indian standards being prepared on ISO metric trapezoidal screw threads. The other standards published so far in the series are:

- IS : 7008 (Part I)-1973 ISO metric trapezoidal screw threads: Part I Basic and design profiles
- IS : 7008 (Part II)-1973 ISO metric trapezoidal screw threads: Part II Pitch diameter combinations
- IS : 7008 (Part III)-1973 ISO metric trapezoidal screw threads: Part III Basic dimensions for design profiles
- IS : 7008 (Part IV)-1973 ISO metric trapezoidal screw threads: Part IV Tolerancing system
- IS : 7684-1975 Limits of sizes for ISO metric trapezoidal nut threads (diameter range 8 to 100 mm)
- IS : 7685-1975 Limits of sizes for ISO metric trapezoidal bolt threads (diameter range 8 to 100 mm)
- IS : 7727-1975 Limits of sizes for ISO metric trapezoidal bolt threads (diameter range 105 to 300 mm)

AMENDMENT NO. 1 AUGUST 2004
TO
IS 7726 : 1975 LIMITS OF SIZES FOR
ISO METRIC TRAPEZOIDAL NUT THREADS
(DIAMETER RANGE 105 TO 300 mm)

(Page 7, Explanatory Note) — Substitute the following for the existing:

'EXPLANATORY NOTE'

This standard is based on DIN 103 Blatt 6 (October 1972) Metrisches ISO – Trapezgewinde, Grenzmasse fur Muttergewinde von 105 bis 300 mm Nenndurchmesser (ISO metric trapezoidal screw threads; Limits of sizes for internal screw threads from 105 to 300 mm diameter, issued by Deutscher Normenausschuss (DNA). This standard is one of a series of Indian Standards on ISO metric trapezoidal screw threads. The other standards published so far in the series are:

- | | |
|--------------------------|--|
| IS 7008 (Part 1) : 1999/ | ISO metric trapezoidal screw threads : Part 1 |
| ISO 2901 : 1993 | Basic profile and maximum material profile
(second revision) |
| IS 7008 (Part 2) : 1988/ | ISO metric trapezoidal screw threads : Part 2 |
| ISO 2902 : 1977 | Pitch diameter combinations (first revision) |
| IS 7008 (Part 3) : 1988/ | ISO metric trapezoidal screw threads : Part 3 |
| ISO 2904 : 1977 | Basic dimensions (first revision) |
| IS 7008 (Part 4) : 1999/ | ISO metric trapezoidal screw threads : Part 4 |
| ISO 2903 : 1993 | Tolerances (second revision) |
| IS 7684 : 1975 | Limits of sizes for ISO metric trapezoidal nut threads (diameter range 8 to 100 mm) |
| IS 7685 : 1975 | Limits of sizes for ISO metric trapezoidal bolt threads (diameter range 8 to 100 mm) |
| IS 7727 : 1975 | Limits of sizes for ISO metric trapezoidal bolt threads (diameter range 105 to 300 mm) |